

Product datasheet for **MR218907**

Aplf (NM_001170489) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aplf (NM_001170489) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aplf
Synonyms:	2010301N04Rik; AI452191
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR218907 representing NM_001170489
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCTTCGACTTCTTTCTGCAGCCTCTGGACGCGCGTCCCGCGTGCCCGTGGGGCCGGGCAGACTG
 TGATAGGCCCGCGGCCGCTGCTGGGAATAACAGACAAAAGAGTATCCAGAAGACATGCCATTCTTGAAGT
 GGTGATAGTCAGCTTCAATCAAGCCAATCCATAGGAATCCATGTTTCTACCAGTCTCGGAGAAGAGC
 CAACACTCGCCAATGGAGACGCAAGTGTGGAGCCAGTTGCATCCCGGGATAGCTTTTCCCTGTTACTTG
 ACAAGTACGCTTTCCGTGTTTTCTGCAGAATCTGAAGTGGAGATGGAGTGTACTCTGAGAAAACAGTCA
 GATGCTTGATGAAGATGATATATTGAGTGAAGTGCAGAAGTCCCCTGTGGTTAACTTACCTGATAAGACA
 ACTGGTGCCTCACAGCTGCAAGGAAGCCCTGAAATAACCAAGACCAAGTGTCCCACCATAGATCCTATGT
 CCTCTTCAGGTGAATGCAGAGCTTTCAGTGAGCACCAGCCAGTCTACCCAGAGGAAAAGAATCCTCCC
 AGCTTGGATGTTGGCGGAAAGTCTAAGTGACCAGAGCCTCTCCACACCAGCTGAGGGGGGAGATAAGGAT
 GTCATCCAGAGGAGTGGAAAAGCAGGAACCTGTGAAGATAGAACCCAGGAAACACATCATGGCATGGGA
 AAAAGCGCTTAGTCCATCAGGAAATTCAAAAAGTGTGTGAGCGGAAACAAGACCTGGGAAGAAGTGCAG
 AAAGGCTGACCAAGAAGGACCGGTGTTTCTTCTGAGAATGTTCCAGAATCATCATCTTCAAACATAGTA
 AAGGACCCAGATGTGGATATTGTGAAGCAAAATAACAGAAGGACGGGATTTTAATAGAGGAACTTGGTG
 AGGTCTCTAAACATAAAGCCGCCACAAACCAACCACAAATGAAGAGGGCGAGAGTTGTGCACGTGTCCA
 AAGCAAGTCACCTCCTGAGAAATCTCAAGGATGCCATCCTGAGTCTAGCTCTGCTCCCTCCAGTCTGAT
 GCTTTGCACACAGACACAGCTGACCCAGTGTGGGCTGTTGAGAAGAAAGCAAGGTCGGGAGGACGGCCT
 GCTGTATGGGGCCAACCTGCTACAGGAGGAACCCCTCCACTTTCAACACTTCAGCCACCCTGGTGACAG
 TGACTATGGAGAGGTACATGGCACAGATGAAGGTGTGATTGGTGACAGGCCCGAGTGTCCCTATGGAGCG
 TCTTGTTACAGGAAGAACCCCCAGCACAAAGATGGAATATAGGCACAGTGCACCTTCCAGCCAGAGTTGCTC
 TGGATGAAGATGACGATGATGTCGGGCAACCCAGTGACGATGAGGACGAGGAAGACTATGAGCCGACAGA
 TGAAGATTCTGATTGGCACCCAGGAAAGGACGATGAGGAGCAGGAAGATGTGGATGAGCTTTTGAAGAA
 GCAAAAAGTTCTTTCACCTTGAACAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR218907 representing NM_001170489
 Red=Cloning site Green=Tags(s)

MPSDFFLQPLDGGPRVPVPGQTVIGRPLLGITDKRVSRRHAILEVVDSQLRIKPIHRNPCFYQSSEKS
 QHSPMETQVWSQLHPGDSFSLLLDKYAFRVFSAESEVEMECTLRNSQMLDEDDILSEMOKSPVVNLPDKT
 TGASQLQGSPEITKTKCPTIDPMSSSGECRAFSEHQPRPTQRKRILPAWMLAESLSDQSLSTPAEGGDKD
 VIQRSGKAGTCDERTPGNTSWHGKRLSPSGNSKSVSAEQDPGKKCRKADQEGPGVSSENVPESSSNIV
 KDPDVDIKTKNQKQDGILIEELGEVSKHKAATKPTTNEEGESCARVQSKSPPEKSQLGCHPESSSAPSSPD
 ALHTDTADPVLGCSEESKYRRTACMYGANCYRRNPLHFQHFHPGSDYGEVHGTDEGVIIGDRPECPYGA
 SCYRKNPQHKMEYRHSALPARVALDEDDDDVGPSSDEDEEYPTDESDWHPGKDDEEQEDVDELLKE
 AKSSLHLKH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9044_c08.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001170489

ORF Size: 1497 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001170489.1](#), [NP_001163960.1](#)

RefSeq Size: 3184 bp

RefSeq ORF: 1500 bp

Locus ID: 72103

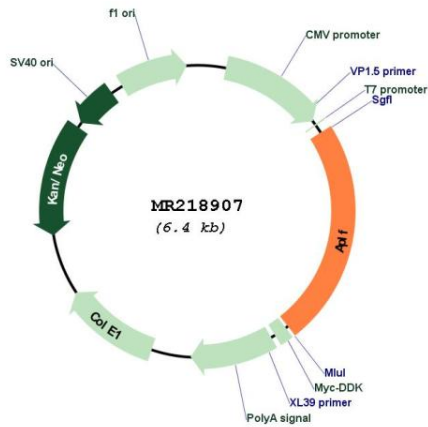
UniProt ID: [Q9D842](#)

Cytogenetics: 6 D1

MW: 55.4 kDa

Gene Summary: Nuclease involved in single-strand and double-strand DNA break repair. Recruited to sites of DNA damage through interaction with poly(ADP-ribose), a polymeric post-translational modification synthesized transiently at sites of chromosomal damage to accelerate DNA strand break repair reactions. Displays apurinic-apyrimidinic (AP) endonuclease and 3'-5' exonuclease activities in vitro. Also able to introduce nicks at hydroxyuracil and other types of pyrimidine base damage. Together with PARP3, promotes the retention of the LIG4-XRCC4 complex on chromatin and accelerate DNA ligation during non-homologous end-joining (NHEJ).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218907